

AMENDMENTS TO THE SPECIFICATION

Page 1, immediately following the title "METHOD FOR IDENTIFYING CHARACTERISTICS OF MOLECULES," please insert the following paragraph:

This application is a U.S. National Phase Application pursuant to 35 U.S.C. 371 of International Application No. PCT/GB2004/001665, which was filed April 16, 2004, claiming benefit of priority of British Patent Application No. 03008852.3, which was filed April 16, 2003. The entire disclosure of each of the foregoing applications is incorporated herein by reference.

Page 19, immediately after claim 16, please insert a new page containing the following abstract of the application:

ABSTRACT

The present invention is a method for identifying one or more characteristics of a target molecule, and comprises the steps of: converting the characteristics of the molecule into a polynucleotide of defined sequence, wherein each characteristic is represented by at least one distinct unit on the polynucleotide, the unit comprising at least a single base; contacting the polynucleotide with at least one of the nucleotides dATP, dTTP, (dUTP), dGTP and dCTP, under conditions that permit the polymerisation reaction to proceed, wherein the at least one nucleotide comprises a detectable label specific for the nucleotide; removing any non-incorporated nucleotides and detecting any incorporation events; removing any labels; and repeating steps (ii) to (iv) to thereby identify the different units, and thereby the characteristics of the molecule.